

Title (en)  
USE OF MAPK INHIBITORS TO REDUCE LOSS OF HEMATOPOIETIC STEM CELLS DURING EX VIVO CULTURE AND/OR GENETIC MANIPULATION

Title (de)  
VERWENDUNG VON MAPK-INHIBITOREN ZUR VERRINGERUNG DES VERLUSTS HÄMATOPOETISCHER STAMMZELLEN WÄHREND DER EX-VIVO-KULTIVIERUNG UND/ODER GENETISCHEN MANIPULATION

Title (fr)  
UTILISATION D'INHIBITEURS DE MAPK POUR RÉDUIRE LA PERTE DE CELLULES SOUCHES HÉMATOPOÏÉTIQUES PENDANT LA CULTURE EX VIVO ET/OU MANIPULATION GÉNÉTIQUE

Publication  
**EP 3368052 A4 20190717 (EN)**

Application  
**EP 16860828 A 20161027**

Priority  

- US 201562246964 P 20151027
- US 2016059204 W 20161027

Abstract (en)  
[origin: WO2017075274A1] Provided herein are methods for preparing hematopoietic stem cells (HSCs), for example, human HSCs suitable for engraftment in the presence of a p38 MAPK inhibitor. Methods for assessing engraftment of HSCs (e.g., human HSCs) are also provided.

IPC 8 full level  
**A61K 35/14** (2015.01); **C12N 15/85** (2006.01)

CPC (source: EP US)  
**A01K 67/0271** (2013.01 - EP US); **A61K 35/14** (2013.01 - EP US); **A61K 35/28** (2013.01 - EP US); **C12N 5/0647** (2013.01 - EP US); **C12N 15/85** (2013.01 - EP US); **A01K 2207/12** (2013.01 - EP US); **A01K 2207/15** (2013.01 - EP US); **A01K 2267/0381** (2013.01 - EP US); **A61K 2035/124** (2013.01 - EP US); **C12N 2501/727** (2013.01 - EP US); **C12N 2740/13043** (2013.01 - EP US); **C12N 2740/16043** (2013.01 - EP US)

Citation (search report)  

- [I] WO 2012141971 A2 20121018 - UNIV LELAND STANFORD JUNIOR [US], et al
- [XI] JING ZOU ET AL: "Inhibition of p38 MAPK activity promotes ex vivo expansion of human cord blood hematopoietic stem cells", ANNALS OF HEMATOLOGY, vol. 91, no. 6, 19 January 2012 (2012-01-19), DE, pages 813 - 823, XP055562587, ISSN: 0939-5555, DOI: 10.1007/s00277-011-1397-7
- [XI] KEISUKE ITO ET AL: "Reactive oxygen species act through p38 MAPK to limit the lifespan of hematopoietic stem cells", NATURE MEDICINE, vol. 12, no. 4, 26 March 2006 (2006-03-26), pages 446 - 451, XP055203670, ISSN: 1078-8956, DOI: 10.1038/nm1388
- [A] YI LUO ET AL: "Rapamycin Enhances Long-Term Hematopoietic Reconstitution of Ex Vivo Expanded Mouse Hematopoietic Stem Cells by Inhibiting Senescence :", TRANSPLANTATION, vol. 97, no. 1, 1 January 2014 (2014-01-01), GB, pages 20 - 29, XP055562585, ISSN: 0041-1337, DOI: 10.1097/TP.0b013e3182a7fcf8
- See references of WO 2017075274A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2017075274 A1 20170504**; CA 3003433 A1 20170504; DK 3368052 T3 20220314; EP 3368052 A1 20180905; EP 3368052 A4 20190717; EP 3368052 B1 20211208; ES 2908041 T3 20220427; HK 1258782 A1 20191122; US 2018325947 A1 20181115

DOCDB simple family (application)  
**US 2016059204 W 20161027**; CA 3003433 A 20161027; DK 16860828 T 20161027; EP 16860828 A 20161027; ES 16860828 T 20161027; HK 19101144 A 20190123; US 201615771683 A 20161027